

REMARKS

This is in response to the Office Action that was mailed on June 1, 2005. The status of the parent application is updated in the first paragraph of the specification. A minor formal correction is made to claim 1. New claims 9 and 10 are added to preferred embodiments of the invention. See, e.g., the paragraph bridging page 4-5 of the specification. No new matter has been introduced. Claims 1-10 are pending in the application.

Claims 1-8 were rejected under 35 U.S.C. §103(a) as being unpatentable over US 6,573,356 B2 (Araki) in view of US 5,231,207 (Yanagisawa). The rejection is respectfully traversed.

The present application claims the benefit under 35 U.S.C. §120 of application Serial No. 09/974,843, filed October 12, 2001.

Common Ownership. The inventions of the present application and of application Serial No. 09/974,843 and U.S. Patent No. 6,573,356 B2 were, at the time the inventions of the present application and of application Serial No. 09/974,843 were made, owned by Shin-Etsu Chemical Co., Ltd.

It is respectfully submitted that because of the above-mentioned common ownership, the Araki patent may not be used in a rejection under 35 U.S.C. §103(a) against the present application.

Applicant notes that in any event, Araki fails to teach or suggest component (C) of the compositions employed in the presently claimed methods.

The Invention. The present invention provides a method of improving adherence to an architectural part or an electrical or electronic part upon exposure to hot steam of a room temperature curable (RTC) organopolysiloxane composition. Conventionally, it has been difficult to maintain RTC-adhesion in hot steam environments. In accordance with the present invention, blending the specific components (A), (B), and (C) as they are defined in the present claims into a room temperature curable organopolysiloxane composition dramatically improves the adherence of the composition to architectural or electrical or electronic parts upon exposure to hot steam.

Claims 1-8 were rejected under 35 U.S.C. §103(a) as being unpatentable over US 5,733,995 (Kimura) in view of US 5,231,207 (Yanagisawa) and US 5,286,766 (Arai). The rejection is respectfully traversed.

The Kimura reference fails to teach or suggest the use of components (A), (B), and (C) as required by the present invention. Firstly, there is no disclosure in the Kimura reference of the use of alkoxy group-terminated organopolysiloxanes. Kimura uses an amino group-containing hydrolysable silane of the formula $\text{H}_2\text{N}-\text{R}^2-\text{NH}-\text{R}^2-\text{Si}(\text{OR}^3)_3$. Kimura fails to teach or suggest the use of the silanes of the present invention, having an imino (NH) radical and an amino (NH_2) radical and an aromatic ring between the NH and NH_2 radicals. Thus the compositions used in the methods of the Kimura reference correspond to the Comparative Examples in the present specification, which demonstrate inferior hot steam resistance.

Comparative Example 3 of the present specification uses $(\text{CH}_3\text{O})_3\text{Si}-\text{C}_3\text{H}_6-\text{NH}-\text{C}_2\text{H}_4-\text{NH}_2$, which corresponds to the silane of the Kimura reference. The presently claimed

compositions are demonstrated to be unexpectedly superior thereto. In any case, Kimura fails to disclose a composition that comprises a combination of an alkoxysilyl end-blocked organopolysiloxane and a ketoximesilane as defined in the present claims.

Yanagisawa discloses aminosilanes similar to those used in the present invention. However, the Yanagisawa reference discloses only that the amino-containing organosilane compound can be useful as a coupling agent between inorganic and organic materials and that it can serve as an additive of an adhesive composition, and so on. The inorganic-organic composite materials include those made by the combination of an organic resin such as an epoxy resin, a polyimide resin, a polyamide resin, a melamine resin, a polyester resin, etc., and an inorganic filler, such as glass powder, etc. Column 3, line 66 to column 4, line 23. Yanagisawa fails to teach or suggest the use of an organosilicon compound blended into a room temperature curable organopolysiloxane composition.

Kimura is concerned with compositions for automobile seals having a low foamability when dispersed in automobile oils. There is no disclosure in Kimura and Yanagisawa of adhesive properties in their compositions. Therefore, the person of ordinary skill in the art would not be motivated to combine the Kimura and the Yanagisawa references to obtain the organopolysiloxane compositions used in the present invention, which cure into silicone rubber having improved adherence upon exposure to hot steam and are useful for bonding and securing of architectural parts and electrical and electronic parts. It is emphasized, in this regard, that hot steam resistance is different from moisture resistance generally.

Furthermore, Kimura teaches in lines 52-56 of column 3 that "If the amino group-containing organic group bonded to the silicon atom of the component (C) is a group other than

H₂N-R²-NH-R²- group [N-(aminoalkyl)aminoalkyl group], a low foamability in an automatic transmission can not be obtained.” Thus the Kimura reference teaches away from the use of the compound without an N-(aminoalkyl)aminoalkyl group, as disclosed in Yanagisawa. Accordingly a person of ordinary skill in the art would actually be motivated *not to combine* the Kimura and Yanagisawa disclosures.

Although Arai discloses the use of alkoxy group-terminated diorganopolysiloxanes, Arai – even combined with Yanagisawa and Kimura – completely fails to teach or suggest the use of the compositions of the present invention as recited in the present claims. Arai teaches that compositions having a low viscosity and a good extrusion rate give a cured product of high strength and elongation by incorporating two different kinds of hydrolysable silanes in the compositions. Arai provides no hint that his approach could provide the hot steam adhesive resistance provided by the present invention.

Accordingly, the inventive method defined in the present claims -- and the benefits of remarkable adherence upon exposure to hot steam that the presently claimed methods provide -- are not anticipated and are not even suggested by the cited references. None of the references teaches or suggests the inventive method of improving adherence to an architectural part or electrical or electronic part upon exposure to steam of the specific organopolysiloxane compositions recited in the present claims. Due to their incompatibilities, it is impossible to combine the cited references. Even combining the references, however, would not provide the present invention, since there is no disclosure of the use of the specific ketoximesilanes, such as those having vinyl or phenyl groups.

Conclusion

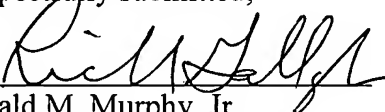
The foregoing amendments and Remarks were discussed in a telephonic interview between Examiner Robertson and Applicant's representative Richard Gallagher on September 1, 2005. Examiner Robertson kindly indicated that the foregoing amendments and Remarks appeared to overcome all of the rejections currently of record herein.

If the Examiner has any further questions concerning this application, he is requested to contact Richard Gallagher, Reg. No. 28,781, at (703) 205-8008.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Dated: September 1, 2005

Respectfully submitted,

By  #28,781
Gerald M. Murphy, Jr.
Registration No.: 28,977

BIRCH, STEWART, KOLASCH & BIRCH, LLP
8110 Gatehouse Rd
Suite 100 East
P.O. Box 747
Falls Church, Virginia 22040-0747
(703) 205-8000
Attorney for Applicant